

Abstract

An X-ray or neutron-optical system comprising an X-ray or neutron source (1) from which corresponding radiation is guided as a primary beam (2) to a sample (4) under investigation, with an X-ray or neutron detector (6) for receiving radiation diffracted or scattered from the sample (4), wherein the source (1), the sample and the detector are disposed substantially on one line (=z-axis) and wherein a beam stop (5; 31; 41) is provided between the sample and the detector whose cross-sectional shape is adjusted to the cross-section of the primary beam is characterized in that the beam stop is disposed to be displaceable along the z-direction for optimum adjustment of the amounts of useful and interfering radiation impinging on the detector. This protects the detector from the influence of the primary beam while allowing a maximum amount of diffracted or scattered radiation to reach the detector, wherein the beam stop can be easily adjusted to temporally changing properties of the beam optics.